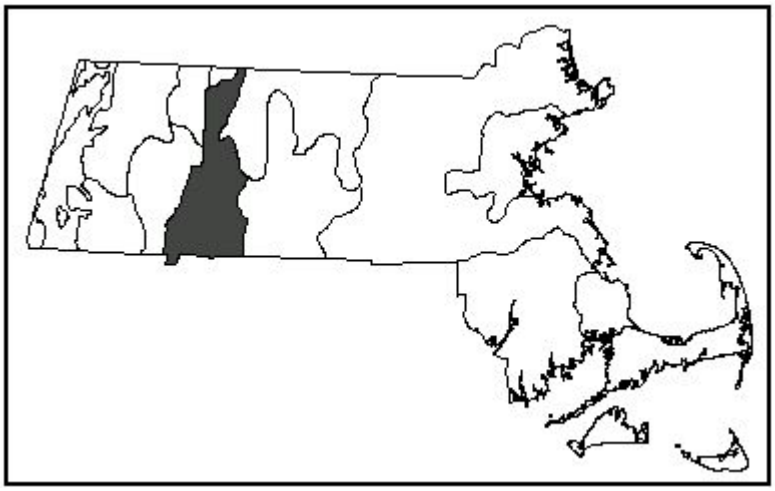
Community Name: **BLACK GUM - PIN OAK - SWAMP WHITE OAK "PERCHED" SWAMP**
Community ELCODE: CP1A2A3000
SRANK: S2



Concept: A red maple-dominated basin swamp in which black gum, pin oak, and swamp white oak are important components of the overstory. This vegetation association is limited to lakebed sediments of glacial Lake Hitchcock in the Connecticut Valley.

Environmental setting: These swamp forests generally occur in basins that have little or no slope where deposits of lake-bottom clays are overlain by silt and sand. The lake-bottom clays appear to be impermeable which creates a "perched" water table isolated from groundwater. There may be some connection to the groundwater along the margins of these wetlands or, to a more limited degree, through slow vertical movement. Periodic flooding occurs as indicated by the lack of organic matter accumulation. More information is needed to determine if this association is restricted to areas of perched water tables.

Vegetation Description: Red maple (*Acer rubrum*) dominates the overstory, but the southern tree species--black gum (*Nyssa sylvatica*), pin oak (*Quercus palustris*), and swamp white oak (*Quercus bicolor*)--are co-dominant. Eastern hemlock (*Tsuga canadensis*) is a common associate. There is pronounced hummock-hollow topography, and most plants, except the sedges, are confined to the hummocks. The shrub layer is similar to other swamp forests. Common species include highbush blueberry (*Vaccinium corymbosum*), northern arrow-wood (*Viburnum dentatum* var. *lucidum*), common winterberry (*Ilex verticillata*) and serviceberry (*Amelanchier* spp.). The herbaceous layer is variable, but cinnamon fern (*Osmunda cinnamomea*) occurs at all known sites. Other common herbaceous species are Canada mayflower (*Maianthemum canadense* var. *canadense*), goldthread (*Coptis trifolia* ssp. *groenlandica*), Indian cucumber-root (*Medeola virginiana*), and various sedge species (*Carex* spp.).

Associations: No associations have been described in Massachusetts.

Habitat values for Associated Fauna: Perched swamps can function as vernal pools in sections that have extended periods of ponding, 2-3 months, and lack fish; these sections provide important amphibian breeding habitat.

Associated rare plants:

CLAYTONIA VIRGINICA	NARROW-LEAVED SPRING BEAUTY	T
LYGODIUM PALMATUM	CLIMBING FERN	SC
PETASITES FRIGIDUS VAR PALMATUS	SWEET COLTSFOOT	T

Associated rare animals:

AMBYSTOMA JEFFERSONIANUM	JEFFERSON SALAMANDER	SC
AMBYSTOMA LATERALE	BLUE-SPOTTED SALAMANDER	SC
CLEMMYS GUTTATA	SPOTTED TURTLE	SC
CLEMMYS INSCULPTA	WOOD TURTLE	SC
HEMIDACTYLIUM SCUTATUM	FOUR-TOED SALAMANDER	SC

From: Swain, P.C. & J.B. Kearsley. 2001. Classification of the Natural Communities of Massachusetts. Version 1.3. Natural Heritage & Endangered Species Program, Division of Fisheries & Wildlife. Westborough, MA.

Examples with Public Access:	Lawrence Swamp, Amherst; Great Swamp, Whately.
Threats:	It is likely that this community type once covered a larger area of the Connecticut Valley, but much of the lake bottom has been cleared and converted to agriculture. Only patches of these perched swamps remain. Current threats include alteration of water chemistry from road and farm runoff, in particular, the accumulation of road salts, ditching by land owners to drain water, and logging.
Management needs:	Disturbed areas appear to have large amounts of European buckthorn (*Rhamnus frangula*). Efforts to prevent further disturbance may prevent the spread of this invasive plant species.
Synonyms USNVC/TNC:	not described; most similar to Quercus palustris-Acer rubrum/Osmunda cinnamomea forest.
MA [old name]:	Tupelo-pin oak-swamp white oak association [CT2F1A1000].
ME:	Not described.
VT:	Not described.
NH:	Not described.
NY:	similar environmental setting to Perched swamp white oak swamp but with different species.
CT:	Acer rubrum/Onoclea sensibilis community [has pin oak and swamp white oak as associates; occurs on glacial lake sediments].
RI:	probably included within Acer rubrum-deciduous shrub swamp.
Golet & Larson, 1974:	Deciduous wooded swamp (WS-1).
Other:	

Author: J. Kearsley **Date:** 7/21/99

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